In the Claims:

Please amend claims 1-33, as follows:

CLAIMS

1. (Currently Amended) A ~~C~~charged particle beam device, comprising:

an emitter ~~(12)~~ for emitting charged particles;

an aperture arrangement ~~(26; 86)~~ with at least one aperture ~~(36)~~ for blocking a part of the emitted charged particles, whereby the aperture arrangement forms a multi-area sub-beam charged particle beam with a cross-section-area and a cross-section-circumference, whereby a ratio between the cross-section-circumference and the cross-section-area is increased by at least 15% as compared to the ratio between a cross-section-circumference and a cross-section-area of a circular beam with the same cross-section-area as the multi-area sub-beam charged particle beam; and

an objective lens ~~(18)~~ for focusing the multi-area sub-beam charged particle beam onto the same location within the focal plane.

2. (Currently Amended) The device ~~Device~~ according to claim 1, whereby the ratio between the circumference of the cross-section and the cross-section-area is increased by at least 40% as compared to the ratio between the circumference of the cross-section and the cross-section-area of a circular beam with the same cross-section-area.

3. (Currently Amended) The device ~~Device~~ according to claim 1 ~~any of claims 1 to 2~~, whereby the aperture arrangement ~~(26; 86a,b)~~ with at least one aperture comprises at least two apertures ~~(36)~~, whereby the multi-area sub-beam charged particle beam is provided as at least two independent charged particle beams.

4. (Currently Amended) The device ~~Device~~ according to claim 1 ~~any of claims 1 to 3~~, whereby the aperture arrangement ~~(26; 86)~~ with at least one aperture ~~(36)~~ forms a multi-area sub-beam charged particle beam with cross-like shape.

5. (Currently Amended) A charged ~~Charged~~ particle beam device, comprising:

an emitter ~~(12)~~ for emitting charged particles;

an aperture arrangement ~~(26; 86)~~ with at least one aperture ~~(36)~~ for blocking a part of the emitted charged particles, whereby the aperture arrangement forms a multi-area sub-beam charged particle beam with a cross-like shape; and

an objective lens ~~(18)~~ for focusing the at least two independent charged particle beams onto the same location within the focal plane.

6. (Currently Amended) The device ~~Device~~ according to claim 5, whereby the multi-area sub-beam charged particle beam is provided with a 4-fold symmetry around an optical axis of the device.

7. (Currently Amended) The device ~~Device~~ according to claim 5 ~~any of claims 5 to 6~~, whereby the aperture arrangement ~~(26; 86a,b)~~ with at least one aperture comprises at least two apertures ~~(36)~~, whereby the multi-area sub-beam charged particle beam is provided as at least two independent charged particle beams.

8. (Currently Amended) A charged ~~Charged~~ particle beam device, comprising:

an emitter ~~(12)~~ for emitting charged particles;

an aperture arrangement ~~(26; 86a,b)~~ with at least one aperture ~~(36)~~ for separating the emitted charged particles into at least two independent charged particle beams; and

an objective lens ~~(18)~~ for focusing the at least two independent charged particle beams onto the same location within the focal plane.

9. (Currently Amended) The device ~~Device~~ according to claim 8, whereby the aperture arrangement forms a multi-area sub-beam charged particle beam with a cross-like shape.

10. (Currently Amended) The device ~~Device~~ according to claim 8 ~~any of claims 1 to 9~~, whereby the emitter is a quasi spot-like emitter with a source diameter below 200 nm.

11. (Currently Amended) The device ~~Device~~ according to claim 8~~any of claims 3, 4 or 8 to 10~~, whereby the at least two independent charged particle beams have a distance (D) with respect to each other such that no interaction occurs between the at least two independent charged particle beams.

12. (Currently Amended) The device ~~Device~~ according to claim 8 ~~any of claims 3, 4 or 8 to 11~~, whereby the at least two independent charged particle beams have a distance (D) with respect to each other, whereby the distance has about the same dimension as the diameter of the at least two apertures ~~(36)~~.

13. (Currently Amended) The device ~~Device~~ according to claim 8 ~~claims 3, 4 or 8 to 12~~, whereby the at least two apertures ~~(36)~~ are formed by a segmented annular aperture.

14. (Currently Amended) The device ~~Device~~ according to claim 8 ~~any of claims 3, 4 or 8 to 13~~, whereby the at least two apertures ~~(36)~~ have an elongated shape with a long axis and short axis, whereby the long axis is arranged radially with respect to an optical axis ~~(1)~~ of the charged particle beam device.

15. (Currently Amended) The device ~~Device~~ according to claim 8 ~~any of claims 3, 4 or 8 to 14~~, whereby the at least two apertures ~~(36)~~ are arranged rotational-symmetrical to an optical axis ~~(1)~~ of the charged particle beam device.

16. (Currently Amended) The device ~~Device~~ according to claim 8 ~~any of the preceding claims~~, whereby the at least one aperture of the aperture arrangement has a 4-fold symmetry shape.

17. (Currently Amended) The device ~~Device~~ according to claim 8~~-14~~, whereby the at least one aperture of the aperture arrangement has a cross-like shape.

18. (Currently Amended) The device ~~Device~~ according to claim 8 ~~15 any of claims 14 to 15~~, whereby the at least one aperture of the aperture arrangement has a cross-like shape formed by four connected elongated apertures.

19. (Currently Amended) The device ~~Device~~ according to claim 8 ~~18 any of the preceding claims~~, whereby the aperture arrangement ~~(26; 86a,b)~~ comprises four apertures ~~(36)~~.

20. (Currently Amended) The device ~~Device~~ according to claim 8 ~~19 any of the preceding claims~~, further comprising a spherical aberration correction element ~~(52)~~.

21. (Currently Amended) The device ~~Device~~ according to claim 20 ~~8 any of claims 7 to 8~~, wherein ~~further comprising~~ the spherical aberration correction element ~~(52)~~ is provided by an octopole element.

22. (Currently Amended) The device ~~Device~~ according to claim 8 ~~21 any of the preceding claims~~, whereby the aperture arrangement ~~(26; 86)~~ is positioned between a source or virtual source ~~(12)~~ and a charged particle beam lens positioned closest to the source.

23. (Currently Amended) The device ~~Device~~ according to claim 8 ~~22~~, whereby the aperture arrangement is integrated in an anode or in an extractor.

24. (Currently Amended) The device ~~Device~~ according to claim 8 ~~23 any of the preceding claims~~, further comprising ~~at least one feature from the group of~~:

a charged particle column length below 300 mm;

an optical system including the objective lens ~~(18)~~, whereby the optical system is arranged such that no crossover is generated;

an accelerating means for increasing the charged particle energy while traveling through the charged particle device and a decelerating means for decreasing the charged particle energy for impingement on a specimen; or ~~and~~

a control means for interaction optimizing the at least two independent charged particle beams.

25. (Currently Amended) Method of operating a charged particle beam device, comprising ~~the steps of~~:

illuminating an aperture arrangement ~~(26; 86)~~ with at least one aperture ~~(36)~~ for blocking a part of the emitted charged particles, whereby the aperture arrangement forms a multi-area sub-beam charged particle beam with a cross-section-area and a cross-section-circumference, whereby a ratio between the cross-section-circumference and the cross-section-area is increased by at least 15% as compared to the ratio between a cross-section-circumference and a cross-section-area of a circular beam with the same cross-section-area as the multi-area sub-beam charged particle beam; and

focusing the multi-area sub-beam charged particle beam with an objective lens ~~(18)~~ onto the same location of a specimen ~~(19)~~.

26. (Currently Amended) The method ~~Method~~ of operating a charged particle beam device according to claim 25, wherein the illuminating ~~step~~ comprises:

generating at least two independent charged particle beams~~,~~ .

27. (Currently Amended) The method ~~Method~~ of operating a charged particle beam device according to claim 26, whereby the at least two independent charged particle beams are generated on a circle around an optical axis ~~(1)~~ of the charged particle device.

28. (Currently Amended) The method ~~Method~~ of operating a charged particle beam device according to claim 26 ~~any of claims 26 to 27~~, whereby the at least two apertures are provided such that no significant interaction between the at least two independent charged particle beams occur.

29. (Currently Amended) The method ~~Method~~ of operating a charged particle beam device according to claim 25 ~~any of claims 25 to 28~~, whereby the aperture arrangement

is illuminated such that the at least one aperture is homogeneously illuminated ~~eliminated~~.

30. (Currently Amended) The method ~~Method~~ of operating a charged particle beam device according to claim 25 ~~any of claims 26 to 29~~, further comprising ~~the step~~:

interaction-optimizing each of the at least two independent charged particle beams.

31. (Currently Amended) The method ~~Method~~ of operating a charged particle beam device according to claim 25 ~~any of claims 25 to 30~~, whereby the charged particles are energized to impinge on the specimen ~~(19)~~ with an energy below 3 keV.

32. (Currently Amended) The method ~~Method~~ of operating a charged particle beam device according to claim 25 ~~any of claims 25 to 31~~, further comprising ~~the step~~:

correcting spherical aberrations, which are introduced by guiding parts of the multi-area sub-beam charged particle beam off-axis.

33. (Currently Amended) The method ~~Method~~ of operating a charged particle beam device according to claim 25 ~~any of claims 25 to 32~~, further comprising ~~the step~~:

repeating imaging steps several times to generate a set of focus series measurements; and

generating a 3-dimensional image by superposing the set of focus series measurements.